

Computer-Supported Cooperative Work: Design and Implementation", as recited in paragraph 4 at page 2 of the outstanding Office Action. The Office Action cites section 2, first paragraph, and section 3.2 of Krishnamurthy et al. as substantiation for the alleged existence in the Krishnamurthy system of Applicants' claimed element reciting "one or more scripts each of said one or more scripts having one or more instructions." However, it is Applicants' position that this element of Applicant's disclosure is neither taught nor suggested by the Krishnamurthy et al. Reference, and, in fact, Krishnamurthy et al. teaches away from this element in Applicant's claim 1.

Krishnamurthy et al. teaches the registration of individual specifications via the client command **addspec** (section 2.2.1) consisting of the format "*event_pattern do action*" (section 2, first paragraph). When an event pattern is encountered the server executes the action. The action may consist of a number of executable commands. However, the commands executed within the scope of the teachings of Krishnamurthy et al are static and predefined. For example, when an event of a file being updated is encountered, the action to "touch" a series of peripheral but related files, and hence alter their file date, may be simultaneously invoked. The updating of the file dates of these related files may, in turn, match the event pattern of other specifications. This will, in turn, cause the execution of further commands, and so forth, until the system reaches an equilibrium in which the invocation of further commands does not produce event patterns specified within the system. Following the teachings of Krishnamurthy et al, while a series of commands can be statically invoked, in response to an event, with each command invocation giving rise to event patterns that will invoke still more commands, this system does not disclose or suggest the present invention. A strength of the prior art system described by Krishnamurthy et al. is its ability to organically arrive at solutions to system problems which resist sequential definition but which may be described fully by a discreet number of relationships between objects within the system. However, a key defect of this prior art system is that it provides no predetermined logical connection between the sequence in which commands are invoked. Therefore, it is Applicants' position that this prior art system does not disclose or suggest the presently claimed element relating to the sequential nature of multiple steps contained in a script.

The Applicants' system provides key advantages over the systems of the relied-upon prior art. By way of illustration, the Applicant's system includes a task module which utilizes a script, or a series of instructions, to generate response data (page 6, lines

1-7). As the steps of the script are being sequentially performed, the script is capable of incorporating intermittently received data, resulting from previously executed steps, into the series of instructions that comprise the script. In this manner, the instantly claimed system provides for dynamically modifying both the sequence and the substance of subsequent steps, as described in the instant specification at page 13, lines 3-9 thereof. On this basis, there is no "ill defined" moment at which Applicants' system reaches equilibrium. Rather, Applicants' system works through predefined scripts, dynamically altering their execution in response to system events, eventually arriving at the end of the script and, as generally desired, typically completing a response profile consisting of the response to a request initiated by a user or other process. As a result, Applicants' scripts are both robust and sequential in nature, and may logically branch during their execution based upon complex logic and the relationships existing between entities having characteristics that vary both in nature and in time. Therefore, Krishnamurthy et al.'s sole reliance upon discreet assemblages of commands which form static sub-units sequentially unrelated to other commands gives rise to a methodology that, if anything, teaches away from the presently claimed system. In conclusion, therefore, Krishnamurthy et al. teaches away from the inclusion of the presently recited element "one or more scripts each of said one or more scripts having one or more instructions." Accordingly, the rejection of claim 1 is believed to be untenable and should be withdrawn.

Since the rejection of claim 1 under 35 U.S.C. 103(a) is untenable for the reasons described hereinabove, the rejection of claims 2-4, and 21-26, which depend from claim 1, is also believed to be untenable since these dependent claims serve to further narrow the scope of claim 1 by virtue of the additional limitations provided in those dependent claims.. Illustratively, Krishnamurthy et al. neither teaches nor suggests the simultaneous execution of a plurality of said one or more scripts as claimed in instant claim 2. In this regard, the process management system described in Fig. 1 of the instant specification details the execution of multiple individually registered specifications to achieve software tool development and distribution. Clearly, the individual specifications of Krishnamurthy et al differ in substance from Applicants' scripts, and the simultaneous execution of those scripts, and thus teach away from Applicants' invention.

Likewise, in regard to instant claim 3, Krishnamurthy et al.'s disclosure of a command interpreter neither teaches nor suggests Applicant's converter module, much less the converter module in the instantly claimed system employing the simultaneous

execution of multiple scripts.. More specifically, Applicants' converter module maps event data to one or more scripts and transmits the appropriate signal so that the task module 120 can "fetch" or retrieve the appropriate script, as described at page 23, lines 9-12 of the instant specification. In contrast, Krishnamurthy's command interpreter, lacking a connection to a dynamic execution module such as Applicant's task module, must execute the specification directly. Since the direct execution method described in the Krishnamurthy publication passes on to the specification static environment information, such a method may not "enable successful execution of the action", as conceded in Section 2.3 of this publication. Accordingly, the methodology described in this publication is believed to teach away from the instantly claimed system, and the outstanding rejection of the claims is untenable and should be withdrawn.

Claims 5-19, 28-33 stand rejected as being allegedly unpatentable over Krishnamurthy et al. as applied to claim 1, in view of Waclawsky, as recited at page 4, paragraph 5 of the outstanding Office Action. Waclawsky discloses a system for monitoring and analyzing a data communications network. Waclawsky does nothing to disclose or suggest the element of the present invention recited as "one or more scripts each of said one or more scripts having one or more instructions", alone or in combination with Krishnamurthy. Since Krishnamurthy does not disclose or suggest this quoted element of claim 1, much less the combination of elements comprising the system of claim 1, and since Waclawsky does not disclose or suggest this quoted element of claim 1, the rejection of more focused claims depending from claim 1, namely claims 5-19, and 28-32. Inasmuch as neither reference teaches the inclusion of Applicant's scripts/instructions element, this rejection is untenable and should be withdrawn.

Independent claim 33 also recites the element "one or more scripts each of said one or more scripts having one or more instructions." As discussed above in the context of claim 1, Krishnamurthy teaches away from this element of Applicants' claims. The combination of Krishnamurthy with Waclawsky's disclosure of a resource management module and administrative module, does nothing to disclose or suggest the Applicants' scripts/instructions element, for the reasons given above, and therefore the rejection of claim 33 is believed to be untenable and should be withdrawn.

Claims 20, 27, 34-35, 41-44, and 46 stand rejected as being allegedly unpatentable over Krishnamurthy et al., as applied to claim 1, in view of Bloem et al, as recited at page 4, paragraph 6 of the outstanding Office Action. With regard to claims 20 and 27, the outstanding Office Action apparently relies upon the Bloem reference for teaching one or more scripts preprogrammed to iteratively/dynamically update modify the script's content. However, it is Applicants' position that this is characterization of the Bloem system, as well as the characterization for the Krishnamurthy system, is misplaced. Krishnamurthy has been discussed above. The outstanding Office Action characterizes Krishnamurthy as teaching that "actions are inter-related by events (page 133, second para.) and events trigger actions which in turn [sic] trigger further announcement of specification, which updates the specification script." A close reading of of that portion of the Krishnamurthy reference shows that this publication details the registration of event-action specifications with a centralized server, and that such events are visible to all users of the system. Moreover, events generated by one user can trigger specifications submitted by another user. However, there is no disclosure or suggestion of the matching of an event pattern "announcing" further specifications. Thus, it is clear that, in accordance with the teachings of this reference, specifications are not "announced" or registered by existing specifications but rather by users, as described at page 136, section 2.2.1 of the Krishnamurthy article. In addition, the Krishnamurthy user registered specification resides in a central server as a discrete entity and, as discussed, does not form any part of any script, updateable or otherwise. In contrast, Bloem does teach of system for updating data on a database that includes a type of trigger which, when its predetermined condition is matched, executes other triggers. A database "trigger" is a well defined tool in database management that functions in a manner similar to the more generally applicable event-action specifications of the Krishnamurthy system. In like fashion to the Krishnamurthy system, the triggers of the Bloem system similarly lack any multi-step sequential structure. Both prior art systems are unrelated to scripts, and therefore do not teach or suggest the aspects of the present invention relating to "one or more scripts ... preprogrammed to iteratively/dynamically update/modify its contents.", as referenced at the top of page 5 of the outstanding Office Action.

The outstanding Office Action characterizes claim 34 as being "basically a method claim of claim 1", and notes the aspect of claims 20 and 27 relating to dynamically incorporating results of execution into a script. Since claim 34 claims a method utilizing

the system of claim 1, and since the relied-upon prior art, alone or in combination, does not disclose or suggest the instantly claimed dynamic system, the rejection of these claims is believed to be untenable for the reasons given above. For analogous reasons, the rejections of claims 20 and 27 are also believed to be untenable, and should be withdrawn. Moreover, the rejection of dependent claims 35-46, which depend from claim 34, should also be withdrawn.

Claims 36-40, 45, and 47-59 stand rejected as being allegedly unpatentable over Krishnamurthy et al. in view of Bloem et al as applied to claim 34 and further in view of Waclawsky, as recited at page 5, paragraph 7, of the outstanding Office Action. Each of these references has been discussed above. The combination of the three references does nothing to teach Applicant's invention as claimed in claims 36-40, 45, and 47-59. With regard to claim 47, because none of the related art contains any element analogous to the sequentially executed scripts of the Applicant's system, claim 47 is believed allowable for the same reasons put forth with regards to claim 1. It is respectfully submitted that claim 47 traverses Examiner's rejection. As Examiner's objection to claim 47 is now considered traversed, dependent claims 48-58, which serve to further narrow the scope of claim 47, are believed to be in a condition such as to merit allowance.

The outstanding rejection in regard to claim 59 refers to the rejection of claim 47, and further states that Krishnamurthy teaches selective execution. However, Applicants' claim 59 recites "processing the inputs to generate at least one set of self-modifying commands that can be executed" and "selectively executing one or more of said at least one set of self-modifying commands." As noted above, while the event-action specifications of Krishnamurthy are selectively executed in response to the occurrence of an event pattern, as noted in the discussion of claim 47, Applicant's self-modifying commands are the equivalent of a script. As previously noted, the related art teaches away from the utilization of a script such as that found and claimed in Applicant's system. As such, Applicant respectfully believes that the outstanding rejection of claim 59 is untenable and should be withdrawn.

Accordingly, applicants' submit that none of the relied-upon references, alone or in combination, disclose or suggest the invention as presently claimed. Accordingly, the outstanding rejections under 35 USC 103(a), of claims 1-4, and 21-26 over Krishnamurthy et al., and of claims 20, 27, 34-35, 41-44 and 46 over Krishnamurthy et al. as applied to

claim 1 in view of Bloem et al., and of claims 5-19, 28-33 over Krishnamurthy et al. as applied to claim 1 in view of Waclawsky, and of claims 36-40, 45, 47-59 over Krishnamurthy et al. in view of Bloem et al as applied to claim 34 and further in view of Waclawsky are all untenable and should be withdrawn. Applicants submit that the application is now in condition for allowance. Therefore, applicants respectfully request reconsideration of these claims, and an early receipt of a Notice of Allowance thereof.

If the Examiner has any questions or believes that a discussion with Applicants' attorney would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number below.

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Respectfully submitted,

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